

10/010,607

ATT: Officer STORES T.

Office of Initial Patent Examination

fx: 0211.1.703.308.7751

As advised here is the
missing page 5 from the previously
faxed corrected document.

'Page 5' is page 3 of Specification.
Kind regards for your assistance.

Officer

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3.

The forgoing and other objects and advantages are attained by a hypodermic syringe with a retracting needle system wherein the retraction mechanism is triggered by the hydraulic pressure within the injection fluid during the injection stoke.

The hypodermic syringe of the present invention comprises a cylindrical body element for containing a fluid; a needle assembly comprising a needle holding member and a hollow needle, the needle holding member repositionable between an injecting position wherein the needle projects axially outward from the body element and a pre-use and post-use position wherein the needle is retracted and contained completely within the body element; a plunger rod reciprocally received into the body element forming a fluid chamber therebetween, and whereby positive and negative pressure forces are generated by adjustment of the plunger rod within the body element whereby fluid is drawn into, and expelled from, the body element through the hollow needle; a retraction mechanism comprising: a spring between the needle holding member and the axial end of the cylindrical body element through which the needle member projects and which generates an axial pressure on the needle holding member; at least one retaining member engaging the needle holding member and retaining the needle holding member against the axial pressure of the spring; at least one activating member within the needle holding member responding to positive fluid pressure within the fluid chamber to release the retaining member from the needle holding member; whereby the needle is automatically deployed into the injecting position by depression of the plunger rod prior to drawing fluid into the fluid chamber and is automatically retracted within the body element at the completion of an injection stroke of the plunger rod and which retraction renders the syringe safe for handling and disposal.

The features of the present invention can best be understood together with further objects and advantages by reference to the following description taken in connection with the accompanying drawings, wherein like numerals indicate like parts.